



SEQUENCE LISTING

<110> Stamatatos, Leonidas
Barnett, Susan W.
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<120> HIV-1 VACCINES AND SCREENING METHODS
THEREFOR

<130> 2570-1-001N

<140> 09/891,609

<141> 2001-06-26

<150> 60/214,608

<151> 2000-06-27

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1941

<212> DNA

<213> Human immunodeficiency virus type 1

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gacacagagg	tacataatgt	ctggggccaca	catgcctgtg	taccacacaga	ccctaaccce	240
caagaaatag	tattggaaaa	tgtgacagaa	aattttaaca	tgtggaaaaa	taacatggta	300
gaacagatgc	atgaggatat	aatcagttta	tgggatcaaa	gtctaaagcc	atgtgtaaag	360
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<210> 2
<211> 646
<212> PRT
<213> Human immunodeficiency virus type 1

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Leu Trp Val Thr Val Tyr Tyr Gly Val Pro Val Trp Lys Glu Ala Thr
35      40      45
Thr Thr Leu Phe Cys Ala Ser Asp Ala Lys Ala Tyr Asp Thr Glu Val
50      55      60
His Asn Val Trp Ala Thr His Ala Cys Val Pro Thr Asp Pro Asn Pro
65      70      75      80
Gln Glu Ile Val Leu Glu Asn Val Thr Glu Asn Phe Asn Met Trp Lys
85      90      95
Asn Asn Met Val Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp
100     105     110
Gln Ser Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu
115     120     125
His Cys Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp
130     135     140
Lys Glu Met Asp Arg Gly Glu Ile Lys Asn Cys Ser Phe Lys Val Gly
145     150     155     160
Ala Gly Lys Leu Ile Asn Cys Asn Thr Ser Val Ile Thr Gln Ala Cys
165     170     175
Pro Lys Val Ser Phe Glu Pro Ile Pro Ile His Tyr Cys Ala Pro Ala
180     185     190
Gly Phe Ala Ile Leu Lys Cys Asn Asp Lys Lys Phe Asn Gly Ser Gly
195     200     205
Pro Cys Thr Asn Val Ser Thr Val Gln Cys Thr His Gly Ile Arg Pro
210     215     220
Val Val Ser Thr Gln Leu Leu Leu Asn Gly Ser Leu Ala Glu Glu Gly
225     230     235     240
Val Val Ile Arg Ser Glu Asn Phe Thr Asp Asn Ala Lys Thr Ile Ile
245     250     255
Val Gln Leu Lys Glu Ser Val Glu Ile Asn Cys Thr Arg Pro Asn Asn
260     265     270
Asn Thr Arg Lys Ser Ile Thr Ile Gly Pro Gly Arg Ala Phe Tyr Ala
275     280     285
Thr Gly Asp Ile Ile Gly Asp Ile Arg Gln Ala His Cys Asn Ile Ser
290     295     300
Gly Glu Lys Trp Asn Asn Thr Leu Lys Gln Ile Val Thr Lys Leu Gln
305     310     315     320
Ala Gln Phe Gly Asn Lys Thr Ile Val Phe Lys Gln Ser Ser Gly Gly
325     330     335
Asp Pro Glu Ile Val Met His Ser Phe Asn Cys Gly Gly Glu Phe Phe
340     345     350
Tyr Cys Asn Ser Thr Gln Leu Phe Asn Ser Thr Trp Asn Asn Thr Ile
355     360     365

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Pro	Ile	Arg	Gly	Gln	Ile	Arg	Cys	Ser	Ser	Asn	Ile	Thr	Gly	Leu	Leu
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Arg	Pro	Gly	Gly	Gly	Asp	Met	Arg	Asp	Asn	Trp	Arg	Ser	Glu	Leu	Tyr
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Ala	Lys	Arg	Arg	Val	Val	Gln	Arg	Glu	Lys	Arg	Ala	Val	Thr	Leu	Gly
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Ala	Met	Phe	Leu	Gly	Phe	Leu	Gly	Ala	Ala	Gly	Ser	Thr	Met	Gly	Ala
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Val	Gln	Gln	Gln	Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His
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Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln	Gln	Leu	Leu	Gly	Ile	Trp	Gly
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Cys	Ser	Gly	Lys	Leu	Ile	Cys	Thr	Thr	Ala	Val	Pro	Trp	Asn	Ala	Ser
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Trp	Ser	Asn	Lys	Ser	Leu	Asp	Gln	Ile	Trp	Asn	Asn	Met	Thr	Trp	Met
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Glu	Trp	Glu	Arg	Glu	Ile	Asp	Asn	Tyr	Thr	Asn	Leu	Ile	Tyr	Thr	Leu
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Ile	Glu	Glu	Ser	Gln	Asn	Gln	Gln	Glu	Lys	Asn	Glu	Gln	Glu	Leu	Leu
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Glu	Leu	Asp	Lys	Trp	Ala	Ser	Leu	Trp	Asn	Trp	Phe	Asp	Ile	Ser	Lys
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Trp	Leu	Trp	Tyr	Ile	Lys										
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<210> 3

<211> 1860

<212> DNA

<213> Human immunodeficiency virus type 1

<400> 3

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ctacattgca ctaatttgaa gaatgctact aataccaaga gtagtaattg gaaagagatg 360
gacagaggag aaataaaaaa ttgctctttc aaggctcggag ctggaaaatt gataaattgt 420
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ggaccatgta caaatgtcag cacagtacaa tgtacacatg gaattaggcc agtagtgtca 600
actcaattgc tgttaaatgg cagtctagca gaagaagggg tagtaattag atctgaaaat 660
ttcacagaca atgctaaaac tataatagta cagctgaagg aatctgtaga aattaattgt 720
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<210> 4

<211> 619

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 4

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20          25          30
Tyr Asp Thr Glu Val His Asn Val Trp Ala Thr His Ala Cys Val Pro
35          40          45
Thr Asp Pro Asn Pro Gln Glu Ile Val Leu Glu Asn Val Thr Glu Asn
50          55          60
Phe Asn Met Trp Lys Asn Asn Met Val Glu Gln Met His Glu Asp Ile
65          70          75          80
Ile Ser Leu Trp Asp Gln Ser Leu Lys Pro Cys Val Lys Leu Thr Pro
85          90          95
Leu Cys Val Thr Leu His Cys Thr Asn Leu Lys Asn Ala Thr Asn Thr
100         105         110
Lys Ser Ser Asn Trp Lys Glu Met Asp Arg Gly Glu Ile Lys Asn Cys
115         120         125
Ser Phe Lys Val Gly Ala Gly Lys Leu Ile Asn Cys Asn Thr Ser Val
130         135         140
Ile Thr Gln Ala Cys Pro Lys Val Ser Phe Glu Pro Ile Pro Ile His
145         150         155         160
Tyr Cys Ala Pro Ala Gly Phe Ala Ile Leu Lys Cys Asn Asp Lys Lys
165         170         175
Phe Asn Gly Ser Gly Pro Cys Thr Asn Val Ser Thr Val Gln Cys Thr
180         185         190
His Gly Ile Arg Pro Val Val Ser Thr Gln Leu Leu Leu Asn Gly Ser
195         200         205
Leu Ala Glu Glu Gly Val Val Ile Arg Ser Glu Asn Phe Thr Asp Asn
210         215         220
Ala Lys Thr Ile Ile Val Gln Leu Lys Glu Ser Val Glu Ile Asn Cys
225         230         235         240
Thr Arg Pro Asn Asn Asn Thr Arg Lys Ser Ile Thr Ile Gly Pro Gly

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				245					250					255		
Arg	Ala	Phe	Tyr	Ala	Thr	Gly	Asp	Ile	Ile	Gly	Asp	Ile	Arg	Gln	Ala	
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His	Cys	Asn	Ile	Ser	Gly	Glu	Lys	Trp	Asn	Asn	Thr	Leu	Lys	Gln	Ile	
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	290					295					300					
Gln	Ser	Ser	Gly	Gly	Asp	Pro	Glu	Ile	Val	Met	His	Ser	Phe	Asn	Cys	
305					310					315					320	
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	370					375					380					
Ile	Thr	Gly	Leu	Leu	Leu	Thr	Arg	Asp	Gly	Gly	Lys	Glu	Ile	Ser	Asn	
385					390					395					400	
Thr	Thr	Glu	Ile	Phe	Arg	Pro	Gly	Gly	Gly	Asp	Met	Arg	Asp	Asn	Trp	
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Arg	Ser	Glu	Leu	Tyr	Lys	Tyr	Lys	Val	Val	Lys	Ile	Glu	Pro	Leu	Gly	
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Ala	Val	Thr	Leu	Gly	Ala	Met	Phe	Leu	Gly	Phe	Leu	Gly	Ala	Ala	Gly	
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465					470						475				480	
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Leu	Ile	Tyr	Thr	Leu	Ile	Glu	Glu	Ser	Gln	Asn	Gln	Gln	Glu	Lys	Asn	
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